Cotton/Soybean Insect Newsletter

Volume 12, Issue #13 Edisto Research and Education Center in Blackville, SC 27 July 2017

Pest Patrol Alerts

The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.

Field Day

Our Row-Crop Field Day (mostly cotton and soybeans) at the Edisto Research and Education Center is scheduled for 10 August 2017. Please plan to join us. Here is a picture of the program. Please let us know by 3 August if you plan to come to help us plan for the tour and lunch. See you then!

The Edisto Row Crop Field Day
August 10, 2017
Edisto Research & Education Center, 64 Research Road, Blackville, SC

8:00 to 9:00		Registration
9:00	John Mueller	Welcome…load busses & travel to field areas
9:10	Phillip Williams	Developing a sensor-based, variable-rate nutrient management technique for center pivot irrigation systems
9:20	Williams & Nafchi	Progress report on sensor-based nitrogen management and related equipment
9:30	Jonathan Fox	Real-time, variable-depth tillage for managing soil compaction in cotton production
9:40	Jose Payero	Advances in sensor-based irrigation management
9:50	Kendall Kirk	Variable rate prescription development in cotton and soybeans
10:00	Kendall Kirk	Soybean leaf defoliation sensing
10:20	Mike Marshall	Cotton injury response to auxin herbicides
10:40	Jeremy Greene	Management of insects in cotton
10:50	Jeremy Greene	Management of insects in soybeans
11:10	David Gunter	Row widths and seeding rates comparisons in soybean production
11:20	David Gunter	Soybean OVTs
12:00	Lunch	

Certified Crop Advisor (CCA) and Pesticide License credits will be offered

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News from Around the State

Collins Gardner, consultant in the Pee Dee Region, reported yesterday that he had a field of grain sorghum treated for corn earworm with a high rate of pyrethroid that controlled only a small percentage of the larvae. **David Gunter**, our Soybean/Small Grains Specialist, informed me that he also recently sprayed a population of corn earworm on grain sorghum with a high rate of pyrethroid and that he observed great control. So…what does that mean? It means that we might be dealing with bigger pockets of pyrethroid-tolerant *Helicoverpa zea* (bollworm, corn earworm, podworm, etc.) this season. This could likely be an issue in soybeans soon, with

escapes in cotton not being controlled also. Keep your eyes open for this, as there are plenty of moths flying around in the field. **Charles Davis**, county agent in Calhoun County, reported that "the spray rigs have been busy here this week. In a lot of instances it was growth regulator and boron, with a pyrethroid thrown in for good measure. Showers continue to be spotty but heavy when they occur. Aphids seem to have diminished but stink bug damage is not too difficult to find." **Andrew Warner**, county agent in Hampton County, reported that he is not seeing the pressure from bollworm down his way that we thought he would by now. Everything else (stink bugs, spider mites, etc.) is running about normal. **Jonathan Croft**, county agent in Orangeburg County, reported that "kudzu bugs were nearing levels in a few fields that may need treatment soon, if numbers continue to climb." **Justin Ballew**, county agent covering Dillon and Marion Counties, reported that it is "still fairly quiet over this way. Finding plenty of cloverworms in the sweep net on soybeans. Seeing a few CEW, some alfalfa hoppers, and I've found one soybean looper. In cotton, stink bug pressure is building in places. I checked a field yesterday that had damage in almost every boll I pulled apart. I passed the sprayer on my way out of the field."

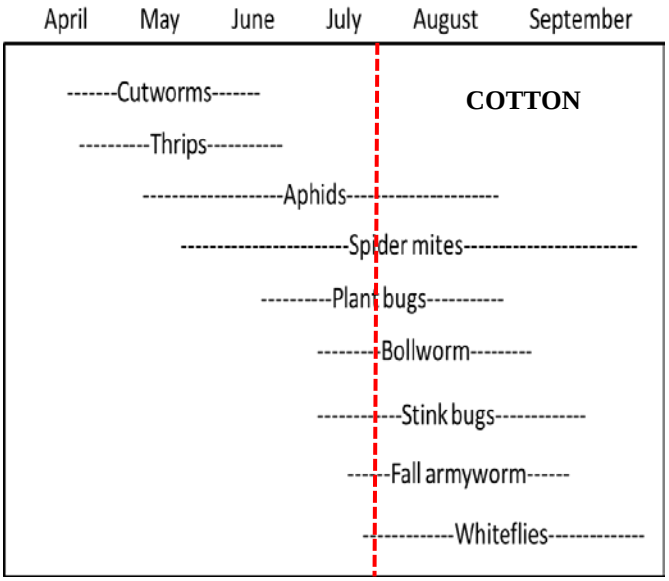
Cotton Situation

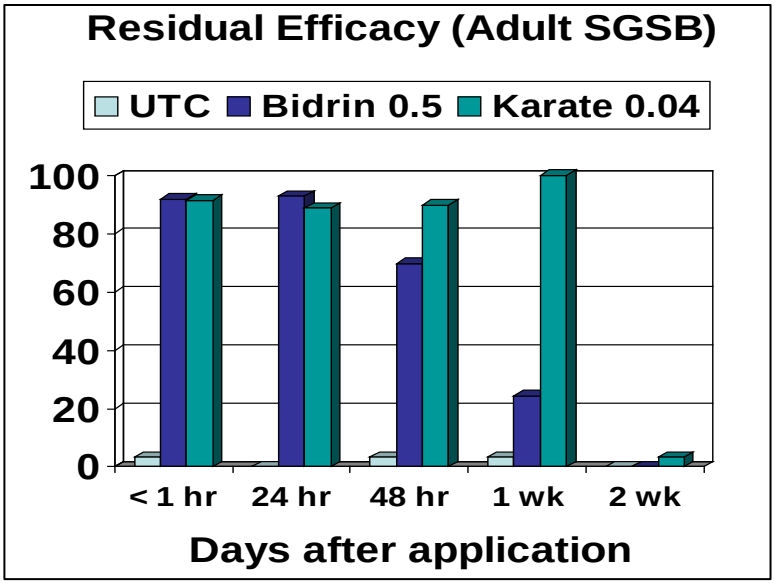
As of 23 July 2017, the USDA NASS South Carolina Statistical Office estimated that about 82% of the crop is squaring, compared with 69% the previous week, 84% at this time last year, and 84% for the 5-year average. About 53% of the crop is setting bolls, compared with 33% the previous week, 38% at this time last year, and 44% for the 5-year average. The condition of the crop was described as 48% excellent, 49% good, 3% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.

Most of our cotton is in the first few weeks of blooming and setting bolls, but some of it is earlier, and some of it is later. The weather has been good for cotton. Here is a loaded plant that has been blooming for weeks (photo by Josh Mays). The fruit set looks good on a lot of the crop. If we keep getting the rain, it could be a very good yielding year.

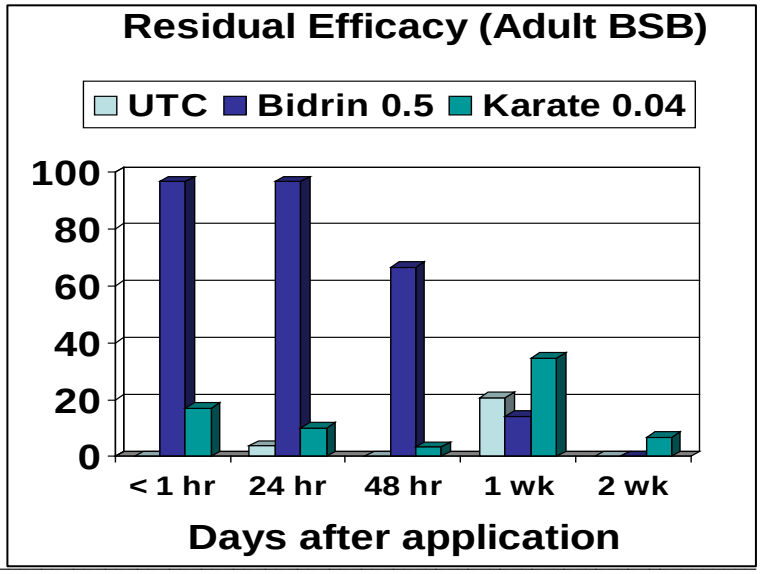
Cotton Insects

Stink bugs are the main issue right now, with spider mites and bollworms as the pile-on species. If you know what week of bloom you are in, follow the dynamic boll-injury threshold for the corresponding week of bloom to manage stink bugs. If you meet or exceed the defined threshold, spray a pyrethroid to control stink bugs. We likely get almost a week of residual control of stink bugs, if the pyrethroid is not





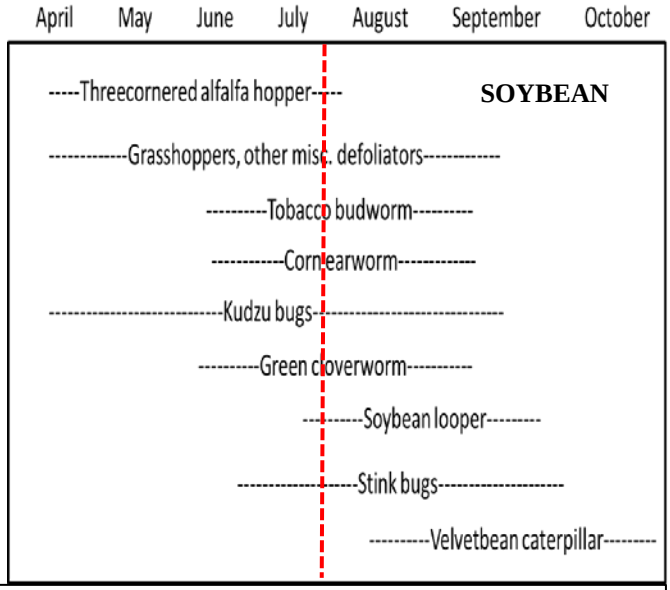
washed off with rain. The chart to the left is from work I did years ago (2008), but we probably still get good residual control of stink bugs with pyrethroids. We caged stink bugs on plants at varying times after an application of the insecticides. The organophosphate (OP) insecticide dicrotophos (Bidrin) only provided residual control for about 2 days in this test, but *lambda*-cyhalothrin (Karate) provided residual control of southern green stink bug (SGSB) for at least a week. This is why we recommend pyrethroids for green and southern green stink bugs – good initial and residual control. When we did the same test with the brown stink bug (BSB), the results were consistent for Bidrin (control for 1 or 2 days), but the pyrethroid was ineffective against brown stink bugs almost immediately after the application (< 1 hr) and for subsequent infestations. Because the brown stink bug is very tolerant to pyrethroids, knowing what species of stink bugs are present in the field is important. Thankfully, the brown stink bug is usually a small percentage of the boll-feeding



bug complex in cotton. So, use a pyrethroid for stink bugs and save the OP for when you really need it. We are hoping that applications of pyrethroids for stink bugs will continue to control bollworms that escape control from Bt proteins. However, as we have been reporting, recent data suggest that we will see field problems in controlling bollworm with pyrethroids at some point. Please report any bollworms surviving applications of a pyrethroid.

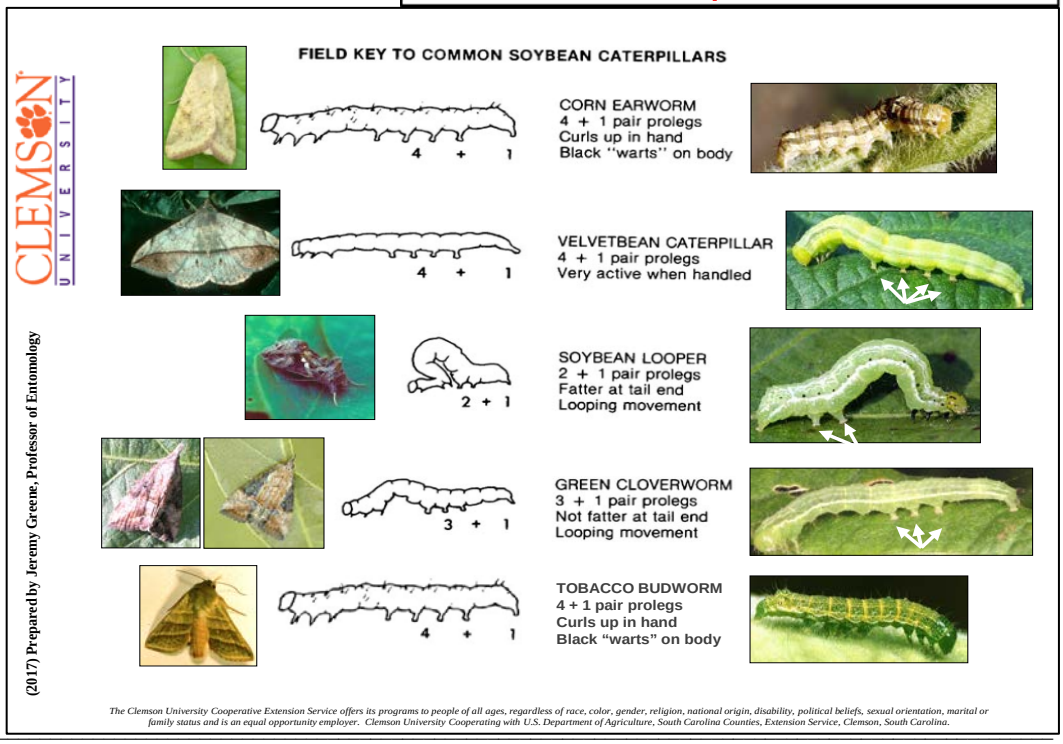
Soybean Situation

As of 23 July 2017, the USDA NASS South Carolina Statistical Office estimated that about 32% of the crop is blooming, compared with 28% the previous week, 30% at this time last year, and 29% for the 5-year average. The condition of the crop was described as 30% excellent, 64% good, 6% fair, 0% poor, and 0% very poor. These are observed/perceived state-wide averages.



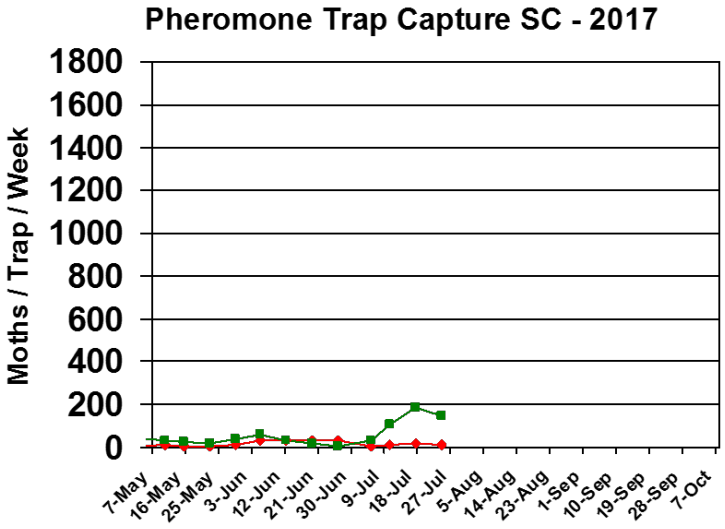
Soybean Insects

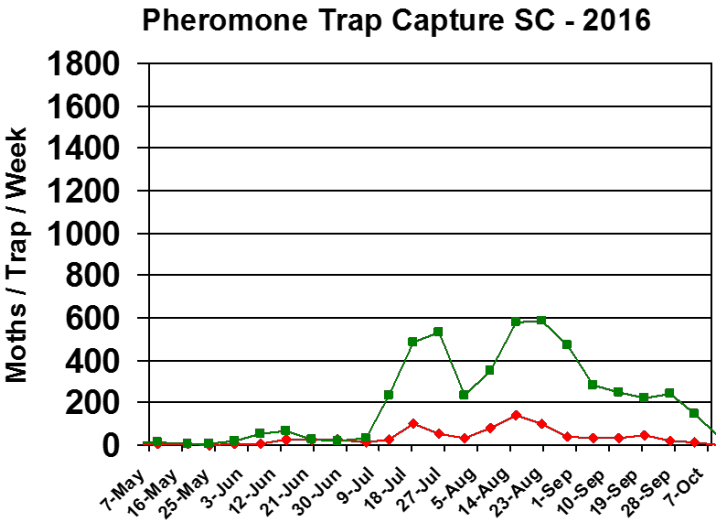
There are many different species of pests present in soybeans right now, but none seem to be an issue yet. Populations of stem-feeding kudzu bugs are still high enough this year to attract attention when scouting and determining whether or not to treat. Spray for kudzu bugs when nymphs are easily observed on most observations down in the canopy or when numbers reach 1 nymph per sweep. Pyrethroid insecticides do a great job in controlling kudzu bugs. Continue to identify the moths taking short flights while you are walking fields. Here is a guide to identifying the common moths and caterpillars in soybeans.



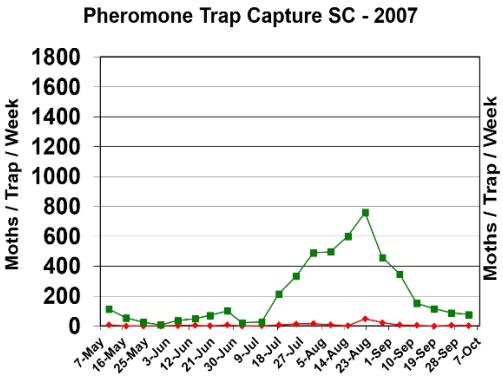
Bollworm & Tobacco Budworm

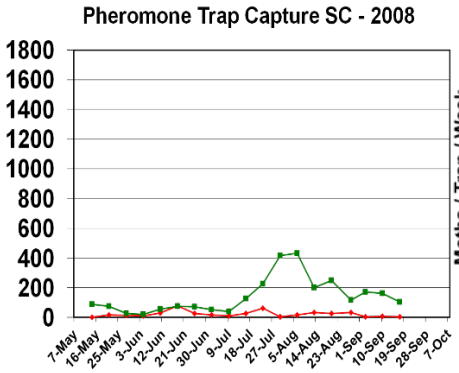
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2016 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

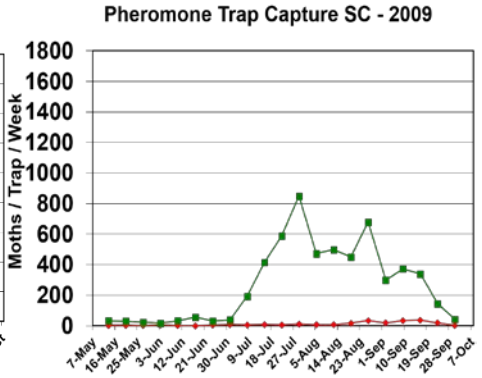


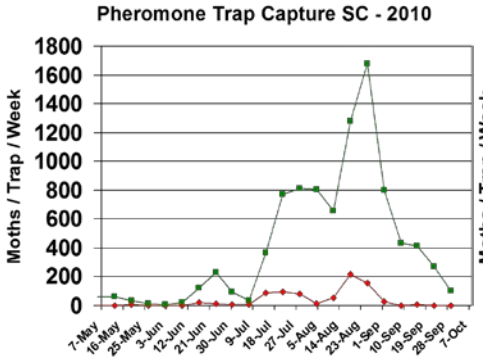


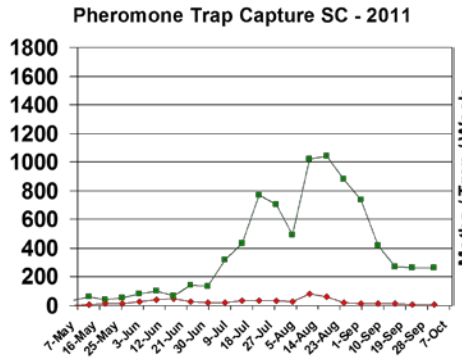
Trap data from 2007-2015 are shown below for reference to other years of trapping data from EREC:

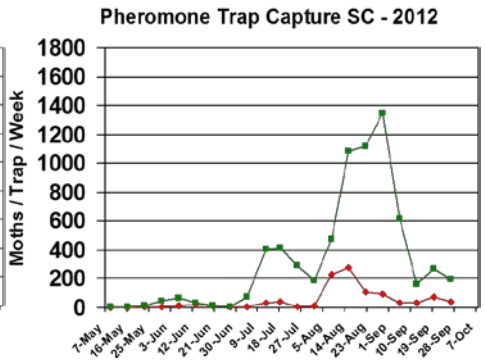


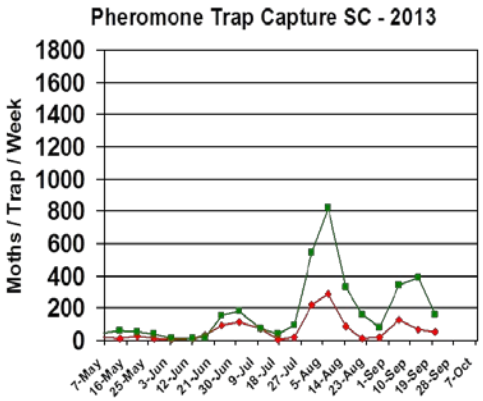


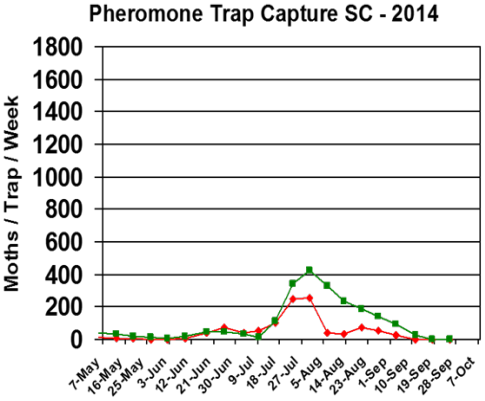


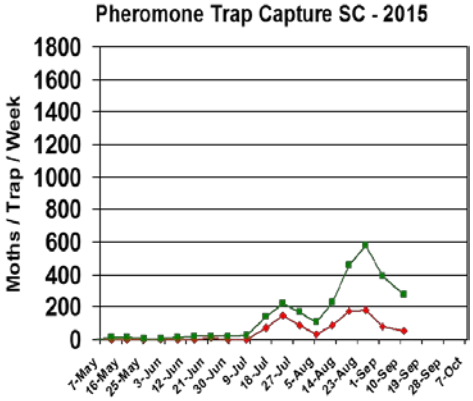












Pest Management Handbook – 2017

Insect control recommendations are available online in the 2017 South Carolina Pest Management Handbook at: http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"

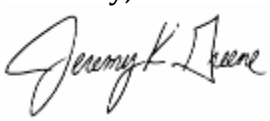
Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats): http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters: http://www.clemson.edu//extension/agronomy/cotton1/newsletters.html

Sincerely,



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